

# Work Order ID 54439

December 9, 2009 11:28:17 AM



Page 1

Item ID:	D3303-043	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Bracket Assembly					
Start Date:	09/12/2009	Start Qty:	20.00	Cust Item ID:		
Required Date:	16/12/2009	Req'd Qty:	20.00	Customer:		

## Reference:

Approvals:	Process Plan:		Date:	09/12/09	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3303	Rev B

100		0.00							
	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1- Assemble as per Dwg D3303-02- Identify as D3303-043								

*ES 10/01/22* (20)

110	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

*=> S 10/01/22*

*QC5*  
(20)

120	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
Powdercoat	Memo	0.00							
Powder Coating	****MASK THREADS PRIOR TO PAINT**** START TIME: 10:45am OVEN TEMPERATURE: 11:15am FINISH TIME: 3:20pm								

*=> M 10/01/22*

(20) 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 54439

December 9, 2009 11:28:17 AM



Page 2

Item ID: D3303-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 09/12/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 16/12/2009 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC3- Inspect Part Finish

0.00

⇒ 5.10.12.22



QC

Memo

0.00

Quality Control

(x20)

140

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

10-1-22 20x

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

00/01/25

MF 10-1-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

December 9, 2009 11:28:21 AM

Page 1

Work Order ID: 54439

Parent Item: D3303-043

Parent Item Name: Bracket Assembly

Comments:

Start Date: 09/12/2009

Required Date: 16/12/2009

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3303-1

Manufactured

No

100

Each

2.0000

20.0000



Plate

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

2

41680

2

D3303-3

Manufactured

No

100

Each

2.0000

20.0000



Bracket

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

2

40943

2

MS20426AD3-3

Purchased

No

100

Each

6,475.000

160.0000



Rivet

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

6475

1563

0

19099

4776

7681

1699

ES 10/01/20  
B 54574 (19)

ES 10/01/20  
B 54575 (20)

ES 10/01/20

160

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 2

December 9, 2009 11:28:21 AM

Work Order ID: 54439



Parent Item: D3303-043



Parent Item Name: Bracket Assembly

Start Date: 09/12/2009

Required Date: 16/12/2009

Comments:

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

MS20470AD4-4

Purchased

No

100

Each

5,411.000

320.0000



Rivet, Universal Head

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

5411

111359

88

112314

1687

113368

3636

MS21075L3

Purchased

No

100

Each

167.0000

80.0000



Nutplate

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

167

112991

167

ES 10/01/20

320

ES 10/01/21

\*

M113539

(48x)

M113734

(32x)

December 9, 2009 11:28:21 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

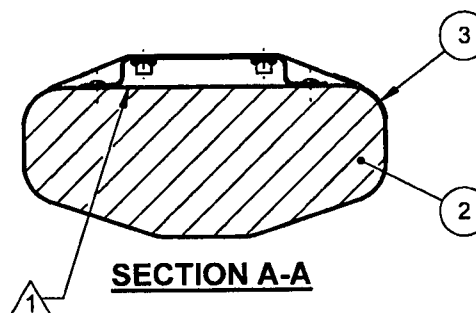
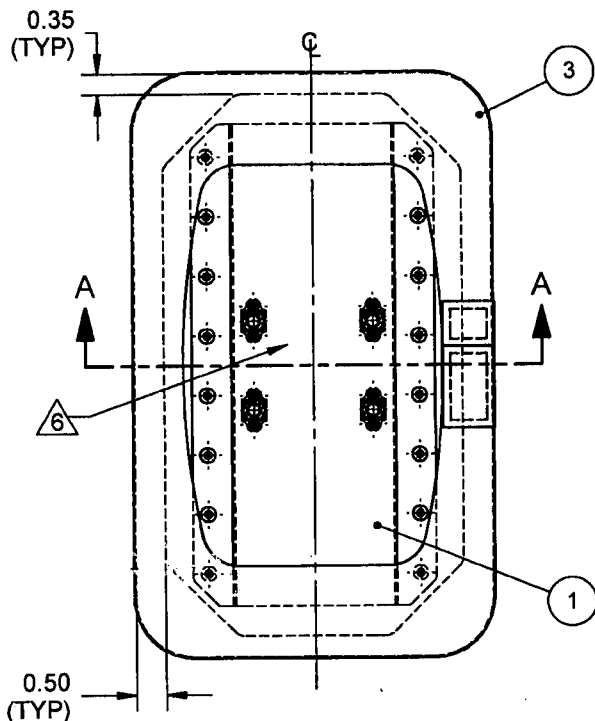
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3303</b>	REV. B SHEET 1 OF 4
DATE <b>06.08.17</b>		TITLE <b>HEAD REST</b>	SCALE 1:3
REV	DATE	DESCRIPTION	
A	04.08.18	NEW ISSUE	
B	06.08.17	UPDATED FLAT PATTERN TO FORM PART IN ONE OPERATION USING OFFSET DIE	

**RELEASED***dc-09.19***DEO ATTACHED**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *54439*

*BP 09-12-9***D3303-041 HEAD REST**

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3303-041	HEAD REST
1	1	D3303-043	BRACKET ASSEMBLY
2	1	D3305-1	FOAM
3	1	D3306-041	COVER ASSEMBLY

**NOTES:**

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE (0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
- 2) COVER HEAD REST WITH D3306-041 COVER ASSEMBLY AS SHOWN
- 3) PART IS SYMMETRICAL AT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFY AS FOLLOWS USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD, P/N D3303-041 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

**COPYRIGHT © 2004 BY DART AEROSPACE LTD**

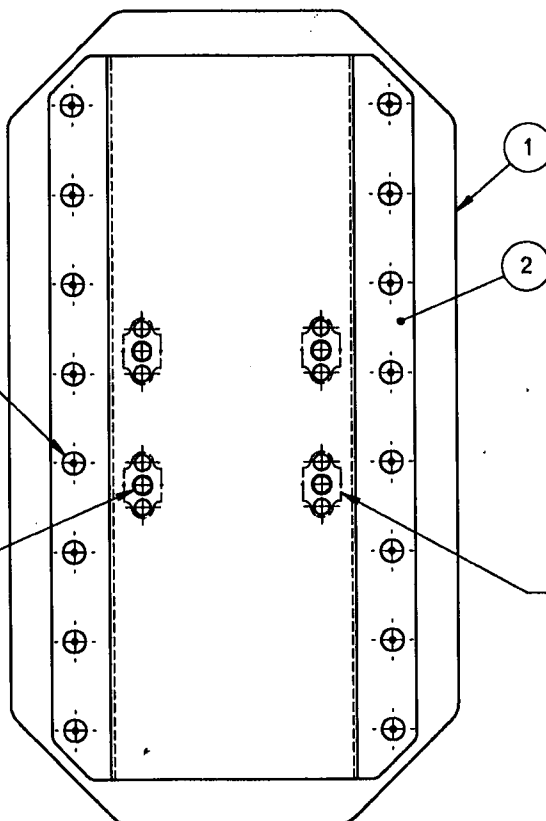
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. <b>D3303</b>	REV. B SHEET 2 OF 4
DATE <b>06.08.17</b>		TITLE <b>HEAD REST</b> SCALE 1:2	

INSTALL ITEM ⑤  
MS20470AD4-4 RIVETS  
(16 PLACES)

MASK THREADS  
PRIOR TO PAINT  
(4 PLACES)



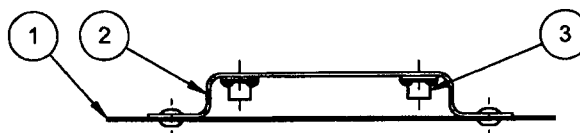
INSTALL ITEM ③  
MS21075L3 NUT PLATE (1)  
USING ITEM ④  
MS20426AD3-3 RIVET (2)  
(4 PLACES)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 54439

**DEO ATTACHED**

**RELEASED**

*06.09.19*



### D3303-043 BRACKET ASSEMBLY

ITEM	QTY -043	P/N	DESCRIPTION
	X	D3303-043	BRACKET ASSEMBLY
1	1	D3303-1	PLATE
2	1	D3303-3	HEAD REST
3	4	MS21075L3	NUT PLATE
4	8	MS20426AD3-3	RIVET
5	16	MS20470AD4-4	RIVET

#### NOTES:

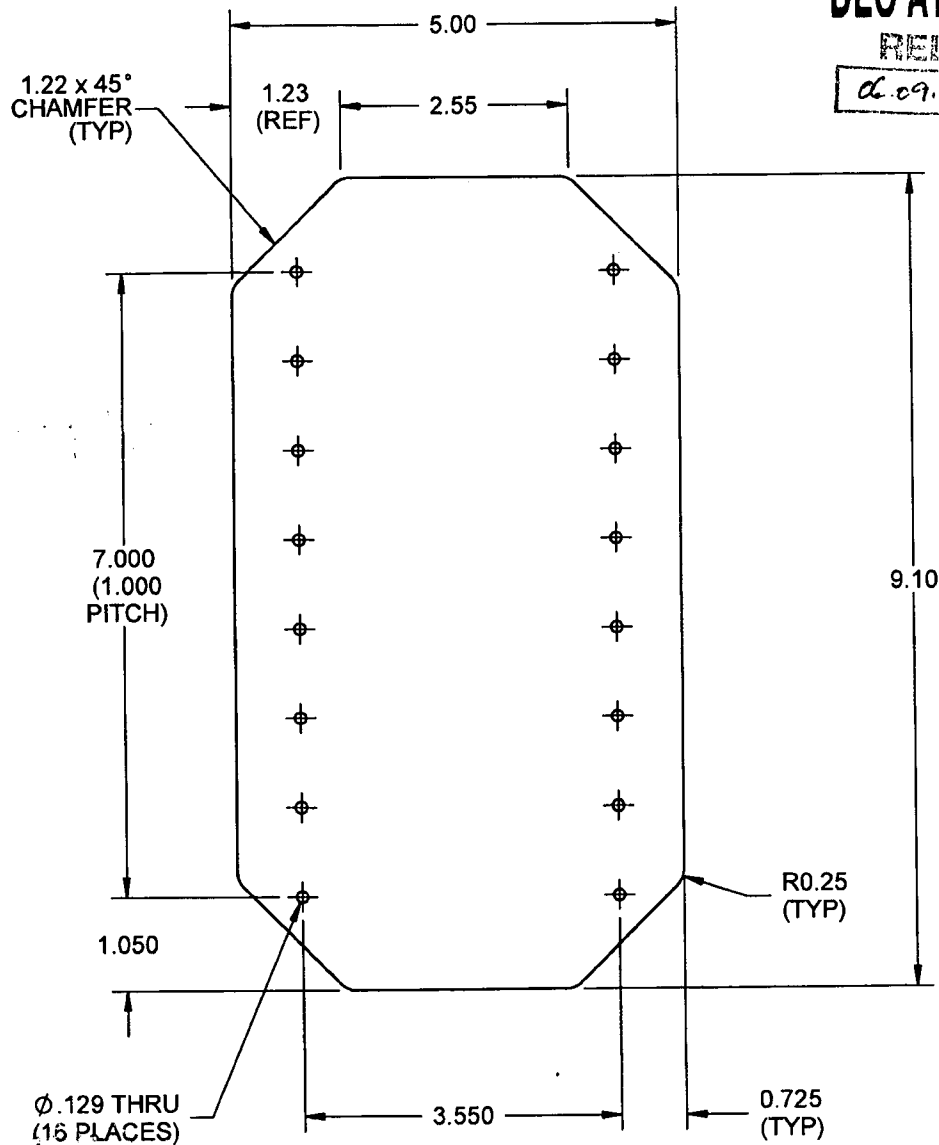
- 1) FINISH: POWDER COAT ASSEMBLY GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

**COPYRIGHT © 2004 BY DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN <i>PH</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D3303	REV. B SHEET 3 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2

**D3303-1 PLATE****NOTES:**

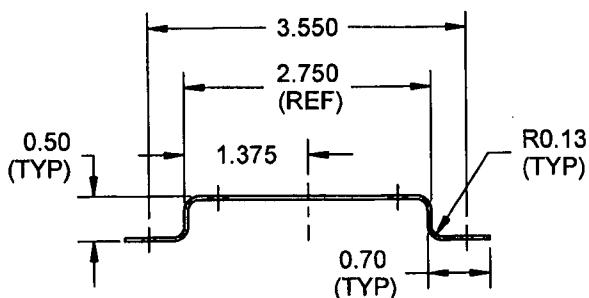
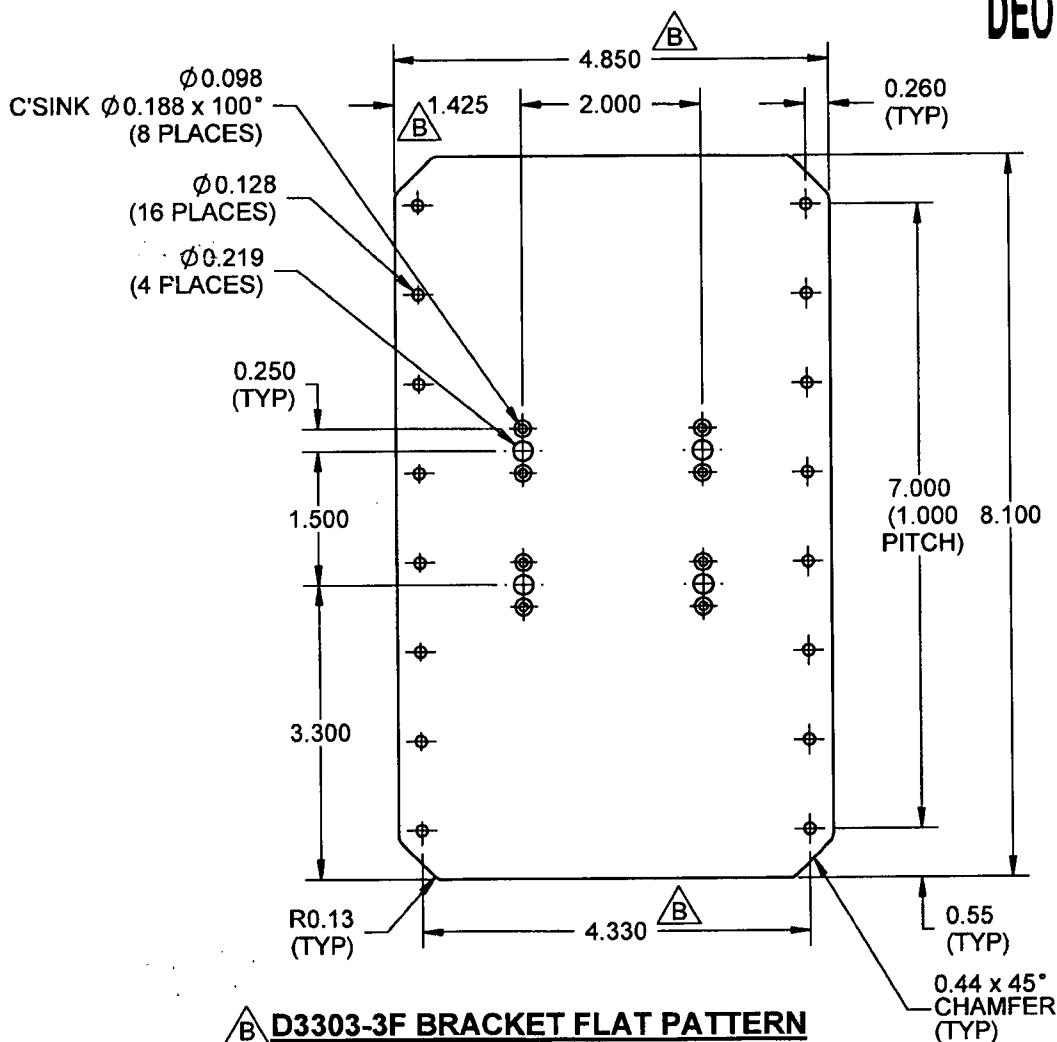
- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK SHEET  
(REF. DART SPEC. M2024T3S.032)
- 2) FINISH: CHEMICAL CONVERSION COAT AS PER DART QSI 005.4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**COPYRIGHT © 2004 BY DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3303	REV. B SHEET 4 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2

**DEO ATTACHED****NOTES:**

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK SHEET (REF. DART SPEC. M2024T3S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT AS PER DART QSI 005.4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

COPYRIGHT © 2004 BY DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DRAWING NO. D3303	TITLE HEAD REST	REV. B	<b>DART AEROSPACE LTD ENGINEERING ORDER</b>		D.E.O. NO. D3303-B-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED <i>h</i>	MFG. APPR. <i>h</i>	APPROVED <i>h</i>		DE APPR. <i>h</i>		
DATE 08.10.15	DATE <i>08.10.15</i>	DATE <i>08/10/16</i>	DATE <i>08/10/16</i>		DATE <i>08/10/16</i>		

SHEET 1 ADD 1300L ADHESIVE BY 3M TO NOTE 1 AS FOLLOWS:

*w/o 54439*

**IS:**

NOTES:

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 OR 1300L ADHESIVE  
(0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

**WAS:**

NOTES:

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE  
(0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

SEE NCR 08-069 FOR FURTHER DETAILS

**RELEASED**  
*08/11/16*